

AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (currently amended): A semiconductor device module structure comprising:

a high-resistance layer of a first conductive type;

a base layer of a second conductive type formed in an upper part of the high-resistance layer of the first conductive type;

an emitter region of a first conductive type formed in an upper part of the base layer of the second conductive type;

an emitter electrode connected to the emitter region;

an insulated gate electrode adjacent to the base layer of the second conductive type;

a guard ring part, ~~wherein a portion of the guard ring has been made deep~~ formed around a cell region including the emitter region;

~~a passivation layer formed on an upper part of the guard ring part and not extending onto an upper part of the cell region;~~

a buffer layer of a first conductive type formed on an underside of the high-resistance layer of the first conductive type;

a collector layer of the second conductive type formed on an underside

of the buffer layer of the first conductive type;

a collector electrode connected to the collector layer; and

a metal flat plate upper heat-sinking part connected to the emitter electrode, ~~at a height such that it is non-contacting with the passivation film~~

wherein the guard ring part comprises:

a semiconductor layer of a second conductive type disposed on an upper part of the high resistance layer of the first conductive type and located around the emitter region;

an insulating layer formed on an upper part of the semiconductor layer of the second conductive type; and

a passivation layer covering the insulating layer without covering the cell region, the passivation layer being disposed in a non-contact relation to the upper heat-sinking part.

Claim 2 (previously presented): The semiconductor device module structure of claim 1, wherein the semiconductor device module structure comprises a diode part, and wherein a cathode electrode located in an upper part of the diode part between the high-resistance layer and the upper heat-sinking part is connected to the upper heat-sinking part.

Claim 3 (previously presented): The semiconductor device module structure of claim 1, wherein one end of the metal flat plate upper heat-sinking part is connected to the emitter electrode and the opposite end of the metal flat plate heat-sinking part is connected to a substrate.